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ABSTRACT

The High School Intervention Centers Program (HSICP) of the Detroit (Michigan) Public Schools was developed to provide an alternative for high school students who were identified as performing below grade level in English and mathematics and who exhibited the self-defeating behavior of truancy. The program provided an opportunity for ninth graders to improve achievement in the basic skills, increasing attendance and reducing the probability of dropping out. An evaluation of HSICP was conducted to show how 193 students from the approximately 450 in the program each year performed compared to a control group of 198 students with comparable achievement from the same 4 high schools for the first semester of 1995-96 and 168 for the second semester. For the first semester, statistically significant differences were found to exist in favor of the experimental group for the variables of grade point averages, attendance, and credit hours earned, but differences on the Metropolitan Achievement Test in reading and mathematics were not significant. For the second semester, statistically significant differences were found in favor of the experimental group for grade point averages and credit hours earned. It should be noted that achievement results were still below district averages for the experimental group. Recommendations are made for program improvement. Appendixes present a literature review and a bibliography. (Contains 12 tables and 56 references.) (SLD)

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ED 407 474

EVALUATION REPORT

HIGH SCHOOL INTERVENTION CENTERS PROGRAM

1995-96

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Detroit Public Schools

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PROGRAM FACTS

Name of Program	:	High School Intervention Centers Program (HSCIP)
Funding Year	:	1995-96
Purpose of Program	:	The High School Intervention Centers were established to provide an alternative for high school students who were identified as performing below grade level in English and mathematics and who exhibited the self-defeating behavior of truancy. The program provided an opportunity for ninth grade students to improve achievement in the basic skills, thereby increasing school attendance and decreasing the potential for school failure and dropping out.
Features of Program	:	Students were referred to the High School Intervention Centers Program for one semester during the 1995-96 school year by the high school principals. They were enrolled in three classes: language arts, mathematics, and group guidance. All classes were focused on the individual needs of students in small group settings, and an intensive goal-directed guidance mode was used to assist students in acquiring specific self-awareness skills and effective problem solving techniques.
Funding Source	:	Title 1, Elementary and Secondary School Improvement Amendments
Funding Level	:	$998,630 (yearly)
Number and Level of Participants	:	Approximately 450 9th grade students (est. per year)
Number and Level of School in Program	:	Four high schools
Staffing Patterns	:	One counselor and two teachers per school
Instructional Time	:	Students are enrolled in three classes for one semester.
Equipment & Materials	:	Typical instructional materials and equipment
First Year of Funding	:	1982-83 school year
Name of Schools	:	Finney, Kettering, Mackenzie, and Western

HIGH SCHOOL INTERVENTION CENTERS PROGRAM (HSICP)
1995-96

Executive Summary

Purposes and Features of the Program

The High School Intervention Centers Program (HSICP) was established to provide an alternative for high school students who were identified as performing below grade level in English and mathematics and who exhibited the self-defeating behavior of truancy. The program provided an opportunity for ninth grade students to improve achievement in the basic skills, thereby increasing school attendance and decreasing the potential for school failure and dropping out.

Students were referred to the High School Intervention Centers Program for one semester during the 1995-96 school year by the high school principals. They were enrolled in three classes: language arts, mathematics, and group guidance. All classes were focused on the individual needs of students in small group settings, and an intensive goal-directed guidance mode was used to assist students in acquiring specific self-awareness skills and effective problem solving techniques.

Methodology

The evaluation of the HSICP was designed to show how the students in the program performed compared to a control group.

FIRST SEMESTER

A control group of 198 students was selected from four high schools (Southwestern, Northwestern, Central, and Southeastern). (These schools did not participate in the 1995-96 HSICP). These students' post grade point averages (GPA's) and attendance were compared with corresponding data for 193 experimental students from four high schools (Western, Mackenzie, Kettering and Finney) in the HSICP. The pre-data were not available. Post-data came from the final report card marking period January, 1995. Also, data from the administration of Metropolitan Achievement Tests (MAT7 Form S, Level S1, Psychological Corporation, 1993) administered in April, 1995 (pre) and April, 1996 (post) were examined for both experimental and control students. The staff from the Office of Research, Evaluation and Testing were responsible for collecting all required evaluation data. One limitation of this study is that some schools did not have complete lists of students enrolled in the program.

SECOND SEMESTER

A control group of 168 HSICP students was selected from the same four high schools. These schools did not participate in the 1995-96 HSICP. These students' pre and post grade point averages (GPA's) and attendance were compared with corresponding data for 165 experimental students from the same five high schools in the HSICP used in the first semester. The pre-data came from the final report card marking period January, 1996. Post-data came from the final report card marking period June, 1996. Also, data from the administration of Metropolitan Achievement Tests (MAT7 Form S Level S1 Psychological Corporation, 1993) administered in April, 1995 (pre) and April, 1995 (post) were examined for both experimental and control students. The staff from the Office of Research, Evaluation and Testing were responsible for collecting all required evaluation data. One limitation of this study is that some schools did not have complete list of students enrolled in the program.

Findings

Product Objectives

First Semester - Statistically significant differences were found to exist in favor of the experimental group for the variables of grade point averages, attendance and credit hours earned. However, Metropolitan Achievement Test (Reading and Mathematics) were not significant.

Second Semester - Statistically significant differences were found to exist in favor of the experimental group for the variables of grade point averages and credit hours earned.

Although the results are statistically significant, it should be noted that most of the variables' results are below the district's results.

A summary of findings is presented below.

FIRST SEMESTER

Pre and post-data for the experimental and control students were analyzed using a t-test to ascertain statistically significant differences between the two groups.

Grade Point Averages

Data for both control and experimental students came from the final report cards January, 1996 (post). Specifically, the experimental students' mean post GPA is 1.05; the control students post GPA is 0.46. There were no pre-data available for the two groups. The post GPA's of the experimental and control students were compared for statistically significant differences. The results were found to be statistically significant at the .05 level in favor of the experimental students. The product objective for GPA was met.

Attendance (Days) Absent

Days absent data for both control and experimental students came from the final report cards January, 1996 (post). Experimental students' mean days absent is 22.4; the control students' mean days absent is 34.2. The post differences between the control and experimental groups were found to be statistically significant at the .05 level in favor of the experimental group. The product objective for absenteeism was met.

Credit Hours Earned

Credit hours earned data for both experimental and control students came from the final report cards January, 1996. Experimental students' credit hours earned is 18.2; the control students' credit hours earned is 9.1. The post differences between the two groups were statistically significant at the .05 level in favor of the experimental group. The product objective for Credit Hours Earned was met.

Metropolitan Achievement Tests (Reading and Mathematics)

Scale scores were used in the test for significant differences between the scores attained by the two groups on the Metropolitan Achievement Tests. Metropolitan Achievement Tests data came from the test results April, 1995 (pre) and April, 1996 (post).

The experimental students' mean scale score for reading changed from 269.6 to 219.1 a difference of -50.5; the control students' mean scale score changed from 278.8 to 279.2 a difference of +0.4. The pre- difference between the control and experimental students was not statistically significant. However, the post difference between the control and experimental students was statistically significant at the .05 level in favor of the control group. The product objective for CAT/MAT7 for reading was not met.

The experimental students' mean scale score for mathematics changed from 251.4 to 224.5 a difference of -26.9; the control students' mean scale score changed from 240.4 to 265.4 a difference of +25.0. The pre difference between the two groups was not statistically significant. The post difference between the two groups was also not statistically significant. The product objective for CAT/MAT7 for mathematics was not met.

SECOND SEMESTER

Pre and post-data for the experimental and control students were analyzed using a t-test to ascertain statistically significant differences between the two groups.

Grade Point Averages

Data for both control and experimental students came from the final report cards January, 1996 (pre) and June, 1996 (post). Specifically, the experimental students' mean GPA increased from 0.65 to 0.89; the control students GPA increased from 0.69 to 0.72. The pre differences between the control and experimental groups were not significant. The post GPA's of the experimental and control students were compared for statistically significant differences. The results were found to be statistically significant at the .05 level in favor of the experimental students. (Note: The post GPA differences of both groups remained below D .) The product objective for GPA was met.

Attendance (Days) Absent

Days absent data for both control and experimental students came from the final report cards January, 1996 (pre) and June, 1996 (post). Experimental students' mean days absent increased from 28.15 to 31.51; the control students' mean days absent increased from 29.22 to 32.42. The pre and post differences between the control and experimental groups were found to be not statistically significant. The product objective for absenteeism was not met.

Credit Hours Earned

Credit hours earned data for both experimental and control students came from the final report cards January, 1996 (pre) and June, 1996 (post). Experimental students' credit hours earned increased from 13.6 to 15.2; the control students' credit hours earned decreased from 12.8 to 11.4. The pre differences between the control and experimental groups were not significant. However, the post differences were statistically significant at the .05 level in favor of the experimental group. The product objective for Credit Hours Earned was met.

Metropolitan Achievement Tests (Reading and Mathematics)

Scale scores were used in the test for significant differences between the scores attained by the two groups on the Metropolitan Achievement Tests. Metropolitan Achievement Tests data came from the test results April, 1995 (pre) and April, 1996 (post).

The experimental students' mean scale score for reading changed from 267.0 to 218.3 a difference of -48.7; the control students' mean scale changed from 270.0 to 268.8 a difference of 1.2. The pre difference between the control and experimental students was not statistically significant. However, the post difference between the control and experimental groups was statistically significant at the .05 level in favor of the control group. The product objective for CAT/MAT7 for reading was not met.

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The experimental students' mean scale changed from 241.0 to 241.5 a difference of 0.5 for mathematics: the control students' mean scale changed from 261.4 to 272.0 a difference of -10.6. The pre difference between the two groups was not statistically significant. The post difference between the two groups was also not statistically significant. The product objective for CAT/MAT7 for mathematics was not met.

Recommendations

Based on a review of the literature and data collected, the following recommendations are made:

Staff

1. Teachers in the program should know, understand and accept the physical, social, emotional and intellectual characteristics of at-risk students.

2. Teachers in the program should be involved in intensive training that will enable them to utilize strategies that have been found successful in schools teaching at-risk students.

3. Teachers who are willing to help at-risk students and fully understand the purpose of the program should be assigned to the project.

4. Teachers who are not comfortable in teaching the at-risk student and are not willing to change should resign from the project and return to regular classrooms.

Curriculum

1. Teachers should develop innovative curriculum that will reach and help the at-risk students.

2. Teachers should use innovative strategies in the areas of reading and mathematics. Regular teaching and regular curriculum have failed these students the last eight years. Teachers have to use different instructional strategies to meet all their needs.

3. Teachers should use curriculum that is meaningful to the students and curriculum that helps the student make the connection between learning and work.

4. Efforts should be made to allocate moneys for special curriculum materials as needed.

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Administration

1. Efforts should be made to appoint a coordinator for the program. There is no supervision or guidelines for the teachers to follow. The program will be less than successful if it continues under the present conditions.

2. Efforts should be made in every project school to appoint one of the administrators to be in charge until a coordinator is appointed.

THE HIGH SCHOOL INTERVENTION CENTERS PROGRAM (HSICP)
1995-96

PROGRAM DESCRIPTION

The High School Intervention Centers Program (HSICP) were established to provide an alternative for high school students who were identified as performing below grade level in English and mathematics and who exhibited the self-defeating behavior of truancy. The program is to provide an opportunity for ninth grade students to improve achievement in the basic skills, thereby increasing school attendance and decreasing the potential for school failure and dropping out.

Students were referred to the High School Intervention Centers (HSIC) Program for one semester during the 1995-96 school year by the high school principals. They were enrolled in three classes: language arts, mathematics, and group guidance. All classes were focused on the individual needs of students in small group settings, and an intensive goal-directed guidance mode was used to assist students in acquiring specific self-awareness skills and effective problem solving techniques.

Students who successfully participated in the program were expected to:

1. strengthen their basic competencies in mathematics and language arts:
2. acquire a better understanding of themselves and their academic potential; and
3. develop problem-solving techniques to improve school performance and school attendance.

The HSIC Program for 1995-96 was funded through the Elementary and Secondary School Improvement Amendments (ESSIA). The centers were operational for Title 1 students in four Detroit high schools. The schools were Finney, Mackenzie, Kettering, and Western.

Targeted students meet Title 1 guidelines and appeared on the school's Title 1 list. Targeted schools were defined as those who had high incidence of under achievement with priority being given to ninth graders with attendance problems.

The Centers are based on the belief that students poor academic achievement and attendance patterns can be improved through the collaborative efforts of the students, parents, and the High School Intervention Centers Program.

LITERATURE REVIEW

A literature review was conducted as part of the 1995-96 Ninth Grade Restructuring Program evaluation. The review of literature conducted for that program yielded pertinent information for the HSICP. Therefore, the literature review is presented in this report. (See Appendix A for the literature review).

PURPOSE OF EVALUATION

The emphasis currently being placed on the development of dropout prevention programs for young people and the concomitant installation of such programs in schools, makes it crucial for educators to examine the effects of such programs. Examination must be made of such variables as the time spent on the program, net effects on grade point averages, attendance, test scores, and other in-school academic and non-academic behaviors. As with all programs, process data, such as the perceptions held by the various interest groups of the program, are crucial. Such perceptions often assist in making program adjustments and often provide telling data about the program.

The purpose of this evaluation is to access the degree to which students improved their academic achievement and attendance, and continued their education beyond the ninth grade. Results are to be used by central, area and school staff members for purpose of program planning.

METHODOLOGY

This evaluation was designed to evaluate the students who were in the 1995-96 High Schools Intervention Centers Program. These students were enrolled in ninth grade during the 1995-96 school years.

The evaluation of the High School Intervention Center Program (HSICP) was designed to answer one major research question state below:

1. How did the HSICP students perform in the 1995-96 school year with respect to grade point averages, attendance, credit hours earned, and standardized achievement tests (reading and mathematics) when compared to a control group.

Product Data

To answer the first question for the first semester, a control group of 198 students was randomly selected from four non-participating high schools (Table 2). Selection was done by asking staff to identify students who would have participated had the school had an HSICP. These students' pre and post GPA's and attendance were compared with corresponding data for 193 HSICP students from four participating high schools (Table 1). Pre data came from the final report card marking period June, 1995. Post data came from the final report card marking period January, 1996; and the Metropolitan Achievement Tests (MAT7, Form S, Level S1 Psychological Corporation, 1993) administered in April, 1995 (pre) and April, 1996 (post) were examined for both the experimental and control students.

To answer the first question for the second semester, a control group of 168 students was randomly selected from four non-participating high schools. Selection was done by asking staff to identify students who would have participated had the school had an HSICP. These students' pre and post GPA's and attendance were compared with corresponding data for 165 HSICP students from five participating high schools. Pre data came from the final report card marking period January, 1996. Post data came from the final report card marking period June, 1996; and the Metropolitan Achievement Tests (MAT7, Form S, Level S1, Psychological Corporation, 1993) administered in April, 1995 (pre) and April, 1996 (post) were examined for both the experimental and control students.

The Office of Research, Evaluation and Testing staff were responsible for collecting all required product evaluation data.

TABLE 1

HIGH SCHOOL INTERVENTION CENTERS PROGRAM
EXPERIMENTAL SCHOOLS
1995-96

Area	Schools	Grade/ Population	First Semester Experimental Students	Second Semester Experimental Students
A	Western	9/468	59 (44)*	56 (49)*
B	Mackenzie	9/630	47 (46)	53 (49)
E	Kettering	9/634	57 (55)	53 (33)
F	Finney	9/637	52 (48)	48 (34)
TOTAL		9/2403	215 (193)	230 (165)

*The number in parenthesis indicate students who had pre- and post-data in June, 1996.

TABLE 2

HIGH SCHOOL INTERVENTION CENTERS PROGRAM
CONTROL SCHOOLS
1995-96

Area	Schools	Grade/ Population	First Semester Control Students	Second Semester Control Students
A	Southwestern	9/445	53 ( )*	54 (43)*
B	Northwestern	9/554	56 ( )	51 (42)
E	Pershing	9/896	62 ( )	52 (40)
F	Southeastern	9/505	52 ( )	53 (43)
TOTAL		9/	223 (198)	210 (168)

*The number in parenthesis indicate students who had pre- post-data in June, 1996.

PRESENTATION AND ANALYSIS OF DATA

PRODUCT OBJECTIVES

Research Question #1

How did students in the High School Intervention Centers Program (HSICP) perform with respect to grade point averages, attendance, credit hours earned, and Metropolitan Achievement Tests (MAT7) compared to a control group?

There were four product objectives formulated for each semester based on the first research question. The three product objectives follow:

FIRST SEMESTER

Product Objective #1.1

The grade point averages (GPA's) of HSICP experimental students will be significantly higher than the grade point averages of the control students.

Evaluation Results - Grade Point Averages

Table 3 shows the grade point averages (GPA's) of the HSICP experimental and control students at the conclusion of the first semester. GPA's were calculated by assigning a value of 4.0 for letter A, 3.0 for letter B, etc. (All subjects were included in calculating the final GPA's).

TABLE 3

9TH GRADE - GRADE POINT AVERAGE
EXPERIMENTAL AND CONTROL
1995-96
(FIRST SEMESTER)

Month/Year	N	Experimental Group	N	Control Group	S.D.	t Value	Sig. Level
January, '96	193	1.05	184	0.46	0.603	9.528	0.05*

*Statistically significant at the .05 level.

The pre GPA's of the experimental and control students were not available. The post GPA's were compared for statistical difference. The difference was found to be statistically significant at the .05 level in favor of the experimental group. Product Objective #1.1 on Grade Point Averages was met.

Product Objective #1.2

The mean number of days absent for the HSICP experimental students will be significantly lower than for control students.

Evaluation Results - Attendance (Days Absent)

Table 4 shows HSICP experimental and control students' days absent from September, 1995 to January, 1996.

TABLE 4

9TH GRADE - DAYS ABSENT
EXPERIMENTAL AND CONTROL
1995-96
(FIRST SEMESTER)

Month/Year	N	Experimental Group	N	Control Group	S.D.	t Value	Sig. Level
January, '96	193	22.4	184	34.2	14.414	-7.986	0.05*

*Statistically significant at the .05 level.

There were no pre days absent available for the first semester groups. Post results of the control and experimental students were compared for statistical differences; differences were found to exist at the .05 level in favor of the experimental group. Product Objective #1.2 on Attendance was met.

Product Objective #1.3

The credit hours earned during the first semester by the HSIP students will be significantly better than the credit hours earned by the control students.

Evaluation Results

Data in Table 5 show that the experimental students' mean credit hours earned is 18.2; the control students' mean credit hours earned is 9.1 at the conclusion of the first semester of 1995-96 school year.

TABLE 5

CREDIT HOURS EARNED
EXPERIMENTAL AND CONTROL
1995-96
(FIRST SEMESTER)

Month/Year	N	Experimental Group	N	Control Group	S.D.	t Value	Sig. Level
January, '96	193	18.2	184	9.1	9.855	8.941	0.05*

*Statistically significant at the .05 level.

The pre-credit hours earned by the control and experimental students were not available. The post differences were found to be statistically significant at the .05 level in favor of the experimental group. Product Objective #1.3 on Credit Hours Earned was not met.

Product Objective # 1.4

Metropolitan Achievement Test (MAT7) scores for reading and mathematics of the experimental students will be significantly higher than the scores of the control group students.

Evaluation Results - Metropolitan Achievement Test - Equated (MAT7)

Table 6 shows both the experimental and control students' MAT7 reading test scores from April, 1995 (pre) and April, 1996 (post). Specifically, the experimental students' mean scale score decreased by 50.5; the control students' mean scale score inreased by 0.4.

TABLE 6

METROPOLITAN ACHIEVEMENT TEST
9TH GRADE - READING
EXPERIMENTAL AND CONTROL
1995-96
(FIRST SEMESTER)

Month/Year	N	Experimental Group Scale Score	N	Control Group Scale Score	S.D.	t Value	Sig. Level
April, '95	129	269.6	123	278.8	166.9	0.438	0.6
April, '96	74	219.1	107	279.2	157.4	-2.525	0.1*
Difference		-50.5		+0.4			

*Statistically significant at the .05 level.

The pre mean averages of scale scores as shown in Table 6 were compared for statistical differences. There were no statistically significant differences between the control and experimental groups. The post differences were statistically significant at the .05 level in favor of the control group. Product Objective #1.4 on Metropolitan Achievement Test (Reading) was not met.

TABLE 7

METROPOLITAN ACHIEVEMENT TEST
9TH GRADE - MATHEMATICS
EXPERIMENTAL AND CONTROL
1995-96
(FIRST SEMESTER)

Month/Year	N	Experimental Group Scale Score	N	Control Group Scale Score	S.D.	t Value	Sig. Level
April, '95	129	251.4	123	240.4	154.5	0.566	0.57
April, '96	74	224.5	107	265.4	159.3	-1.700	0.09
Difference		-26.9		+25.0			

Evaluation Results - Metropolitan Achievement Test (MAT7) (Mathematics)

Table 7 shows both the experimental and control students' MAT7 mathematics test scores from April, 1995 (pre) and April, 1996 (post). Specifically, the experimental students' mean NCE score decreased by -26.9 ; the control students' mean NCE score increased by 25.0.

The pre mean MAT7 mathematics scale scores of the experimental and control students were compared for statistical differences; no significant differences were found to exist. The post differences were also not statistically significant. Product Objective #1.4 on Metropolitan Achievement Test (MAT7) (Mathematics) was not met.

SECOND SEMESTER

Product Objective #1.1

The grade point averages (GPA's) of HSICP experimental students will be significantly higher than the grade point averages of the control students.

Evaluation Results - Grade Point Averages

Table 8 shows the grade point averages (GPA's) of the HSICP experimental and control students.

Review of Table 8 shows that the experimental students' GPA's increased by 0.24 and the control students' GPA's increased by 0.03 from January, 1996 (pre) to June, 1996 (post). GPA's were calculated by assigning a value of 4.0 for letter A, 3.0 for letter B, etc. (All subjects were included in calculating the final GPA's).

TABLE 8
9TH GRADE - GRADE POINT AVERAGES
EXPERIMENTAL AND CONTROL
1995-96
(SECOND SEMESTER)

Month/Year	N	Experimental Group	N	Control Group	S.D.	t Value	Sig. Level
January, '96	165	0.65	169	0.69	0.569	0.591	0.55
June, '96	165	0.89	169	0.72	0.778	2.034	0.05*
Difference		+0.24		+0.03			

*Statistically significant at the .05 level.

The pre GPA's of the experimental and control students were compared for statistical significance. No statistical significance was found to exist. However, the post differences were statistically significant at the .05 level in favor of the experimental group. Product Objective #1.1 on Grade Point Averages was met.

Product Objective #1.2

The mean number of days absent for the HSICP experimental students will be significantly lower than for control students.

Evaluation Results - Attendance (Days Absent)

Table 9 shows HSICP experimental and control students' days absent from January, 1996 (pre) and June, 1996 (post).

Review of Table 9 shows that both experimental and control students had an increase in days absent. Specifically, the experimental students' mean days absent increased by 3.36 days absent; the control students' mean days absent increased by 3.20 days absent. The results are considered to be improved of there is a decrease from pre to post measure.

TABLE 9

9TH GRADE - DAYS ABSENT
EXPERIMENTAL AND CONTROL
1995-96
(SECOND SEMESTER)

Month/Year	N	Experimental Group	N	Control Group	S.D.	t Value	Sig. Level
January, '96	165	28.15	169	29.22	15.663	0.626	0.53
June, '96	165	31.51	169	32.42	16.170	0.511	0.60
Difference		+3.36		+3.20			

The pre mean averages of days absent as shown in Table 9 were compared for statistical significant differences. None were found to exist. The post differences were also compared for statistical significant differences. None were found to exist. Product Objective #1.2 on Days Absent was not met.

Product Objective # 1.3

The credit hours earned during the first semester by the HSICP students will be significantly better than the credit hours earned by the control students.

Evaluation Results

Data in Table 10 show that the experimental students showed an increase and the control students showed a decrease in credit hours earned from January, 1995 to June, 1996. Specifically, the experimental students' mean credit hours earned increased by 1.6; the control students' mean credit hours decreased by 1.4.

TABLE 10

9TH GRADE - CREDIT HOURS EARNED
EXPERIMENTAL AND CONTROL
1995-96
(SECOND SEMESTER)

Month/Year	N	Experimental Group	N	Control Group	S.D.	t Value	Sig. Level
June, '95	165	13.6	169	12.8	9.864	0.749	0.45
January, '96	165	15.2	169	11.4	10.687	3.217	0.05*
Difference		+1.6		-1.4			

*Statistically significant at the .05 level.

The pre-credit hours earned by the control and experimental students were compared for sttistically significant differences; none were found to exist. However, the post differences were found to be statistically significant at the .05 level in favor of the experimental students. Product Objective #1.4 on Credit Hours Earned was met.

Product Objective # 1.4

California Achievement Tests (CAT) and Metropolitan Achievement Tests (MAT7) scores for reading and mathematics of the experimental students will be significantly higher than the scores of the control group students.

Evaluation Results - Metropolitan Achievement Test (MAT7) (Reading)

Table 11 shows both the experimental and control students' MAT7 reading test scores from April, 1995 (pre) and April, 1996 (post). Specifically, the experimental students' mean scale score decreased by 48.7; the control students' mean scale score decreased by 1.2.

TABLE 11
METROPOLITAN ACHIEVEMENT TEST
9TH GRADE - READING
EXPERIMENTAL AND CONTROL
1995-96
(SECOND SEMESTER)

Month/Year	N	Experimental Group Scale Score	N	Control Group Scale Score	S.D.	t Value	Sig. Level
April, '95	148	267.0	148	270.0	169.4	-0.151	0.87
April, '96	112	218.3	112	268.8	148.6	-2.544	0.01*
Difference		-48.7		-1.2			

*Statistically significant at the .05 level.

The pre mean averages of scale scores as shown in Table 11 were compared for statistical differences; no differences were found to exist. The post differences were found to be statistically significant at the .05 level in favor of the control group. Product Objective #1.4 - Metropolitan Achievement Test - (MAT7) (Reading) was not met.

Evaluation Results - Metropolitan Achievement Test (MAT7) (Mathematics)

Table 12 shows both the experimental and control students CAT and MAT7 mathematics test scores form April, 1995 (pre) and April, 1996 (post). Specifically, the experimental students' mean NCE score decreased by 0.5; the control students' mean NCE score decreased by 10.6.

TABLE 12

CALIFORNIA AND METROPOLITAN ACHIEVEMENT TESTS
9TH GRADE - MATHEMATICS
EXPERIMENTAL AND CONTROL
1995-96
(SECOND SEMESTER)

Month/Year	N	Experimental Group Scale Score	N	Control Group Scale Score	S.D.	t Value	Sig. Level
April, '95	148	241.0	148	261.4	152.8	-1.14	0.25
April, '96	112	241.5	112	272.0	150.9	-1.51	0.13
Difference		-0.5		-10.6			

*Statistically significant at the .05 level.

The pre mean MAT7 mathematics scale scores of the experimental and control students were compared for statistical differences; no statistically significant differences were found to exist. The post differences were also found to be not statistically significant. Product objective #1.4 Metropolitan Achievement Test (Mathematics) was not met.

CONCLUSION

Product Objectives

First Semester - Statistically significant differences were found to exist in favor of the experimental group for the variables of grade point averages, attendance and credit hours earned. However, Metropolitan Achievement Test (Reading and Mathematics) were not significant.

Second Semester - Statistically significant differences were found to exist in favor of the experimental group for the variables of grade point averages and credit hours earned.

Although the results are statistically significant, it should be noted that most of the variables' results are below the district's results.

RECOMMENDATIONS

Based on the review of the literature and data collected, the following recommendations are made:

Staff

1. Teachers in the program should know, understand and accept the physical, social emotional and intellectual characteristics of at-risk students.
2. Teachers in the program should be involved in intensive training that will enable them to utilize strategies that have been found successful in schools teaching at-risk students.
3. Teachers who are willing to help at-risk students and fully understand the purpose of the program should participate in the project.
4. Teachers who are not comfortable in teaching the at-risk student and are not willing to change should resign from the project and return to regular classroom.

Curriculum

1. Teachers should develop innovative curriculum that will reach and help the at-risk students.

2. Teachers should use innovative strategies in the areas of reading and mathematics. Regular teaching and regular curriculum have failed these students the last eight years. Teachers have to use different instructional strategies to meet all their needs.

3. Teachers should use curriculum that is meaningful to the students and curriculum that helps the student make the connection between learning and work.

4. Efforts should be made to allocate moneys for special curriculum materials as needed.

Administration

1. Efforts should be made to appoint a coordinator for the program. There is no supervision or guidelines for the teachers to follow. The program will be less than successful if it continues under the present conditions.

2. Efforts should be made in every project school to appoint one of the administrators to be in charge until a coordinator is appointed.

APPENDICES

APPENDIX A

Literature Review

LITERATURE REVIEW

The purpose of the literature review is to identify characteristics of effective droupout prevention programs. Based on the literature review, it is apparent that effective programs address several levels of students' experiences:

- At the individual level, interpersonal relationships with adults in school
- At the classroom level, the instructional approaches and curriculum content
- At the school level, the policies which are relevant to dropouts, particularly tracking, absenteeism, suspension, retention (holding a student back to repeat a grade level), and personnel
- At the community level, the involvement of parents and community agencies which serve youth

At each level of students' experiences it is necessary to make the school experience relevant to students' needs.

Deschamps (1992) study examined research from 1980 to 1992 that addressed characteristics of high school dropouts. Data from 32 empirical studies were synthesized into an integrative review. A list of the most common characteristics of high school dropouts was generated and the major policy issues related to dropping out were identified and addressed. Four major categories of dropout characteristics were found: demographic, social and family, deviant behavior in society, and in-school. Some of the more common characteristics of dropouts included ethnicity, low socioeconomic status, coming from a single-parent family, a high rate of absenteeism, disciplinary problems, grade retention, low academic performance, and poor achievement test scores. The major policy issues related to the dropout problem included: the lack of uniform definition of the term dropout; the inaccuracy of statistics measuring local, state and national dropout rates; the correlation between grade retention and dropping out; the dropout rate in special education; and the need for more research on how many dropouts return to school or receive their Graduate Equivalency Diploma.

Because children who live in poverty drop out of school disproportionately, some might argue that important factors influencing high school graduation rates are not within the school's control. Though there are powerful economic and social forces influencing school attendance among poor, urban youth, intervention programs have been successful in affecting drop out rates. This review attempts to identify those factors within the realm of the school's control which can make going to school and graduating worthwhile to students who might otherwise drop out of school.

Interpersonal Relationships

The importance of students' interpersonal relationships with adults in the school is stressed more frequently than almost any other feature or effective programs.

Individualized Treatment/Instruction:

Several studies suggest that treating students as individuals helps to reduce the dropout rate. In Cippollone's study of six schools with differential dropout rates (1987), schools with lower dropout rates had administrators and teachers who were more willing to look at students individually and later specify discipline practices accordingly. Hess, Jr. and others (1986) cite more interaction between teachers and students as characteristic of schools with lower dropout rates in their study of eight Chicago high schools.

Small classes provide an opportunity for more frequent and more intimate contact between students and teachers. Ruby and Law's paper to the American Association of School Psychologists (1987) asserts that successful dropout programs have low student/teacher ratios and provide personal attention.

Caring:

Caring staff is repeatedly cited as an essential component of successful dropout prevention programs. It is also probably the most difficult component to operate. Mann (1985) suggests that teachers should know students by name and ask about their personal lives.

Finally, Cippollone's study of six schools with differential dropout rates (1987) concludes that in schools with lower dropout rates the staff had a sense of advocacy for students and were more willing to become involved in the social and affective needs of students.

Cultural Differences:

McLaughlin (1994) summarized various theories developed to explain minority language learners' failures to thrive in existing school systems. These theories may provide ideas for understanding dilemmas faced by minority youths.

Education psychologists have focused on the individual learner who, they believe, arrives at school broken by impoverishing home and community experiences. This deficit theory calls for helping individual students acquire mastery of skills before moving ahead, as well as providing enrichment to overcome deficits in background experiences.

Organizational theorists have focused on schools and school systems which they see as the primary culprits in school failure. These schools effectiveness proponents call for school restructuring and systemic reform efforts, including rethinking such important issues as how time is used and who is involved in planning and decision making.

Sociologists and anthropologists have focused on powerful economic and political structures that underpin all aspects of society and "create arrangements.....that systematically give voice to some and deny it to others" and are structured "around successful and unsuccessful competence displays such that winners and losers are inevitable" (McLaughlin, p. 53). These critical theorists call for teachers as coaches, pedagogy as problem solving, and a curriculum that addresses important themes connected to the lives of students.

Lastly, sociolinguists have a narrower focus on the teacher-learner interaction, where they find constant miscommunication resulting from different cultural and linguistic preferences for interaction. Cultural differences theorists believe solutions lie in teachers becoming knowledgeable about the culture and language of their students and adopting curriculum and teaching methods to students' needs.

The idea of cultural discontinuity contains elements of both of the last two theories just described. Increasingly, it has become an explanation for the difficulties minority students face in adjusting to and finishing high school.

Theories of cultural discontinuity have their origins in the anthropological studies of ethnic minority groups within a dominant, majority culture. According to students of cultural discontinuity theory, minority children having been initially raised in a distinctive culture of their own, are often thrust into a school system that promotes the values of the majority culture--not those of their own. If the resulting clash of culture continues, the minority child may feel forced to choose one culture at the expense of the other. A tragic paradox emerges: success (in school) becomes failure (in the community), and failure becomes success. Moreover, it has been argued that failure is not simply the passive act of neglecting to complete required tasks, but that it may be a status that is actively pursued by ethnic minority students in order to preserve their culture of origin. In other words, failure in school is a tacit cultural goal that must be achieved (McDermott, 1987; Spindler, 1987).

Self-Esteem:

An analysis of the research and scholarly literature (Walz, 1991) suggests a number of significant findings and generalizations about the importance and the effects of self-esteem upon youth and adults. Overall it would appear that self-esteem can be envisaged as a "social vaccine," a dimension of personality that empowers people and inoculates them against a wide spectrum of self-defeating and socially undesirable behavior (California Task Force to Promote Self-Esteem, 1990.) Among the more compelling generalizations to be made are the following:

- The family is a strong force in the development of self-esteem. The early years are particularly important in establishing an "authentic and abiding self-esteem" in a person.

- High parental self-esteem is crucial to the ability to nurture high self-esteem and personal effectiveness in children.

- School climate plays an important role in the development of the self-esteem of students. Schools that target self-esteem as a major school goal appear to be "more successful academically as well as in developing healthy self-esteem among their students." (California Task Force to Promote Self-Esteem, 1990, p. 5.)

- Self-esteem and achievement may be either the cause or the effect of each other, depending upon the person and the particular situation in which they function.

- Young girls who possess positive self-esteem are less likely to become pregnant as teenagers.

- Persons who hold themselves in high esteem are less likely to engage in destructive and self-destructive behavior including child abuse, alcohol and drug abuse, violence and crime.

- Exclusive attention to just self-esteem or personal achievement may well result in less favorable outcomes in either or both areas than when an approach is used which attends to both self-esteem and achievement. Walz (1991) in postulating the presence of an "esteem-achievement connection" emphasize the importance of presenting students with challenging experiences that enable the student to "earn" high esteem by successfully coping with difficult tasks.

- The choice to esteem oneself or not is ultimately the responsibility of the individual no matter what the background and prior experiences of the individual may be. High self-esteem can never be given to a person by another person or society. It must be sought, "earned" by the individual for him or herself.

- Self-esteem may be expressed as an overall generic characteristic, i.e., "she exhibits a high self-esteem" or as a more specific behavioral attribute, i.e., "he certainly has a high sense of self-esteem in tackling a difficult writing task, but he has absolutely no belief in his competence to do anything numerical." The experience of many counselors would favor a counseling intervention that explores a client's overall self-esteem (enhancing his/her generic self-esteem), but also focuses upon blockages which retard the expression of high self-esteem in specific areas.

- Writers and researchers show general, although by no means complete, agreement on the preconditions necessary for someone to demonstrate high self-esteem. Among the commonly used terms are: security, connectedness, uniqueness, assertiveness, competence, and spirituality.

Research shows (Waltz, 1991) that gaining greater knowledge and understanding of self-esteem can be beneficial to a counselor. However, to specifically impact upon a client's self-esteem requires greater focus and effort upon the part of the counselor. Six action steps are

suggested as guides for how a counselor can intervene to assist clients in enhancing their own self-esteem.

- Acknowledge that the self-esteem of a client is a vital determinant in his/her behavior and should be a major focus of the counseling relationship.

- Explore with the client the meaning of self-esteem and how his/her self-esteem has impacted upon past behaviors and actions (and can influence present and future plans and decisions.)

- Assist the client in assessing the internal and external forces contributing to or retarding their self-esteem. Develop a personally meaningful profile of esteem builders and detractors.

- Recognize that the self-esteem of the counselor has a stimulating or depressing effect upon the esteem of a client and that each needs to be aware of his/her self-esteem and its effect upon others.

- Assist the client in designing a self-esteem enhancement program that is customized to her/his learning style and desired goals.

- Above all else, act upon the conviction that self-esteem is a disposition to know oneself as someone who is competent to cope with the realities and demands of life and as personally worthy of experiencing joy and happiness. Acting upon this conviction a counselor will then know that she/he can neither bestow nor induce self-esteem in another person. Through their efforts, however, counselors can assist a person to learn the processes by which they can examine the antecedents of their self-esteem, and take responsibility for thinking and acting in ways which will heighten their own self-esteem and hence their capacity to experience life confidently and joyously.

Student Motivation:

Much of the recent research on student motivation has rightly centered on the classroom, where the majority of learning takes place and where students are most likely to acquire a strong motivation to gain new knowledge. Making the classroom a place that naturally motivates students to learn is much easier when students and teachers function in an atmosphere where academic success and the motivation to learn are expected and rewarded.

An environment that nurtures educational motivation can be cultivated at home, in the classroom, or throughout an entire school. One of the most effective avenues for engendering student motivation is a school's culture. According to Deal (1987), school culture can be embodied and transformed through channels such as shared values, heroes, rituals, ceremonies, stories, and cultural networks.

Davis (1989) suggests using a wide variety of activities and symbols to communicate motivational goals. "Visible symbols," he says, "illustrate and confirm what is considered to be important in the school." He suggests using "school newsletters, statements of goals, behavior codes, rituals, symbols, and legends" to "convey messages of what the school really values." Staging academic awards assemblies, awarding trophies for academic success and displaying them in trophy cases, scheduling motivational speakers, and publicizing students' success can help them see that the desire to be successful academically is recognized and appreciated.

Klug (1989) notes that school leaders can influence levels of motivation by "shaping the school's instructional climate," which in turn shapes "the attitudes of teachers, students, parents, and the community at large toward education." By effectively managing this aspect of a school's culture, principals can "increase both student and teacher motivation and indirectly impact learning gains."

School administrators can take advantage of times of educational change by including strategies for increasing student motivation. Acknowledging that school restructuring is inevitable, Maehr (1991) challenges school leaders to ensure that "motivation and the investment in learning of students will be enhanced" as a result of school reform. School leaders have seldom "considered motivation vis-a-vis the current restructuring movement," he says, "and few have considered that the school as an entity in its own right, may have effects that supersede those of individual classrooms and the acts of individual teachers."

A positive "psychological environment" strongly influences student motivation, says Maehr. School leaders can create this type of environment by establishing policies and programs that:

- stress goal setting and self-regulation/management
- offer students choices in instructional settings
- reward students for attaining "personal best" goals
- foster teamwork through group learning and problem-solving experiences
- replace social comparisons of achievement with self-assessment and evaluation techniques
- teach time management skills and offer self-paced instruction when possible

Instructional Approaches

The research on dropouts almost universally recommends non-traditional instructional approaches in small class groups. Research suggests utilizing low student/teacher ratios, a multi-media approach, and flexible course scheduling.

Low Student/Teacher Ratios:

Low student/teacher ratios provide greater opportunities for personalized attention. The U.S. General Accounting Office's survey of dropout program (1987) found that individualized instruction favorably influenced dropout reduction.

Many large urban school districts where the dropout problem is particularly acute do not have the resources to provide the recommended student/teacher ratios. However, as Strother (1986) points out, "large schools make it difficult for teachers to respond to individual student's needs." Wheelock and Dorman (1988) address this problem in their research findings regarding adolescents by recommending a team teaching approach, homerooms, and teacher-based counseling as ways to create "smallness within bigness."

Wheelock (1990) states that recent literature suggests it is not students' backgrounds, but schools' response to students' backgrounds that determine students' success in school. School practices and policies adopted in response to student performance in attendance, academics, and behavior also have a significant impact on students' decision to leave school before graduating.

According to a literature review by Quinn (1991) school practices such as placement of at-risk students in alternative, nontraditional programs, individualized counseling, low student-teacher ratio, and peer tutoring successfully lower dropout rates, whereas remediation, retention in grade, tracking, and suspension exacerbate the problem.

Multi-Media Approach:

Media refers to the means of communication. Students at risk are not responding to traditional methods of teaching, such as lectures and seat work. Many researchers feel that creative approaches are needed, particularly to teach basic reading and math skills to older students. Such approaches provide students with opportunities to experience success in school where they have previously failed.

Other researchers support the concept of a multi-media approach which allows students to experience success. Wheelock and Dorman (1988) suggest varying teaching methods and using diverse instructional approaches to provide multiple opportunities for success.

Flexible Scheduling:

In addition to innovation and variety of instructional approaches, changes in the scheduling of classes are encouraged. The U.S. General Accounting Office survey of programs (1987) finds that "flexibility in curriculum and school hours are important to prevent dropping by students unable to progress in the standard school setting."

Cooperative Learning:

Johnson and Johnson (1987) are well-known proponents of this last type of grouping, called cooperative learning. These heterogeneous groups are based on positive interdependence among the group members who help and support one another. Their goals focus on bringing each member's learning to the maximum and on maintaining good working relationships among members. "Nothing is more basic than learning to use one's knowledge in cooperative interaction with others," the Johnsons' state. And they continue: "Greater achievement is typically found in collaborative situations where peers work together than in situations where individuals work alone..."

Johnson and Johnson (1987) recommend assigning students of high, medium, and low abilities in the same group. They also suggest that it is very beneficial for those students who are not as task oriented as others to be put with their more academically oriented peers. Teachers should allow students to choose one person with whom they would like to work, and then carefully place these pairs with others to maximize the heterogeneous makeup of each group.

As the group works together as a team, some of the benefits predicted for individual members are higher critical thinking competencies, more positive social interaction with classmates, improved collaborative competencies, an understanding of other perspectives, and more self-esteem. The Johnsons believe that:

- Cooperative learning procedures may be used successfully with any type of academic task, although they are most successful when conceptual learning is required.

- Whenever possible, cooperative groups should be structured so that controversy and academic disagreements among group members are possible and are managed constructively.

- Students should be encouraged to keep each other on task and to discuss assigned material in ways that ensure elaborate rehearsal and the use of higher learning strategies.

- Students should be encouraged to support each other's efforts to achieve.

Educators must make many choices every year about grouping arrangements. Good teachers who provide supportive environments for their students and who are aware of the strengths and weaknesses of grouping will make the decisions that are right for themselves, for their classroom situation, and for their students.

Cross-Age Tutoring:

Although references in the literature to cross-age and peer tutoring programs are sparse (Natriello and others, 1988), (Wheelock, 1988), these programs appear to produce significant results. Cross-age tutoring seems to meet several needs of students at risk:

- Feeling important, competent, and needed in a school setting
- Developing an interpersonal, interdependent relationship with someone in school
- Reviewing basic math and reading skills without the stigma of remedial education
- Active involvement in the learning process
- Providing individualized instruction to younger students
- Providing an opportunity for community service

Gaustand (1993) states that one to one tutoring programs, such as peer and cross-age tutoring, can result in emotional and learning benefits for the tutor and the tutee. In cross-age tutoring, the tutor is older than the tutee. Advantages of these programs are that tutors are better than adults in relating to their tutees on a cognitive, emotional, and social level. Also, cross-age tutoring offers the tutor the higher status of being older but still being close in age. Tutors can benefit from cross-age and peer tutoring because it allow them to review material, and to improve thinking and communication skills.

Positive Discipline

Criticizing, discouraging, creating obstacles and boundaries, blaming, shaming, using sarcastic or cruel humor, or using physical punishment are some negative disciplinary methods used with young children.

Any adult might occasionally do any of these things. Doing any or all of them more than once in a while means that a negative approach to discipline has become a habit and urgently needs to be altered before the child experiences low self-esteem as a permanent part of his/her personality.

ERIC (1990) in an article on "Positive Discipline" states the following as good approachers to discipline:

- increase a student's self-esteem
- allow the student to feel valued
- encourage the student to feel cooperative
- enable the student to learn gradually the many skills involved in taking some responsibility for what happens to him/her
- motivate the student to change his/her strategy rather than to blame others
- help the student to take initiative, relate successfully to others, and solve problems

School discipline has two main goals: (1) ensure the safety of staff and students, and (2) create an environment conducive to learning. Serious student misconduct involving violent or criminal behavior defeats these goals and often makes headlines in the process. However, the commonest discipline problems involve noncriminal student behavior (Moles, 1989).

These less dramatic problems may not threaten personal safety, but they still negatively affect the learning environment. Disruptions interrupt lessons for all students, and disruptive students lose even more learning time.

As educator researcher Daniel Duke (1989) points out, "The goal of good behavior is necessary, but not sufficient to ensure academic growth." Effective school discipline strategies seek to encourage responsible behavior and to provide all students with a satisfying school experience as well as to discourage misconduct.

When John Hopkins University researchers Gary D. Gottfredson and Denise C. Gottfredson (1989) analyzed data from over 600 of the nation's secondary schools, they found that the following school characteristics were associated with discipline problems:

- rules were unclear or perceived as unfairly or inconsistently enforced
- students did not believe in the rules
- teachers and administrators did not know what the rules were or disagreed on the proper responses to student misconduct
- teacher-administration cooperation was poor or the administration inactive

- teachers tended to have punitive attitudes
- misconduct was ignored
- schools were large or lacked adequate resources for teaching

Written policies should be developed with input from everyone who will be affected by them. Once developed, discipline policies must be communicated to staff, students, parents and community. But a policy on paper is meaningless in itself. Ongoing administrative support, inservice training in new techniques, continued communication, and periodic evaluation and modification are needed to adopt a school discipline plan to the changing needs of the school community.

Curriculum Content

The curriculum content is the "what" of instruction, or the information and knowledge which the school system attempts to convey to its students.

The research on dropouts consistently recommends a curriculum which focuses on infusing basic skills, stressing practical skills, and offering a multiple abilities curriculum.

Basic Skills Instruction:

Students who are at risk of dropping out are typically those who exhibit poor basic academic skills (Wheelage, 1988). Often middle school curriculums assume basic reading comprehension and math skills, however, many students may not have mastered these basic skills yet (Wheelock and Dorman, 1988). Students who are weak in basic skills at the middle school level have increased difficulties in high school. It is extremely important that dropout prevention programs recognize and address the need for students to master basic reading and math skills.

Hornbeck (1991) states that while research has shown that computer-assisted instruction (CAI) can help at-risk students learn basic skills such as reading, writing and mathematics, studies have also revealed that CAI helps students think critically, solve problems and draw inferences.

Stress Practical Skills:

Because the irrelevance of the school experience to students' needs is considered to be the major cause of dropping out, stressing practical skills is recommended by some researchers. Ruby and Law's paper presented at the Annual Meeting of School Psychologists (1987) states that successful programs stress the immediate and practical and offer opportunities for paid employment. Strother (1986) also recommends that the curriculum should focus on real-life problems.

Multiple Abilities Curriculum:

Students who do not experience success in school may not have opportunities to use their strongest abilities as part of traditional curriculums. A multiple abilities curriculum provides a chance for students to use a wide range of skills to earn credit towards graduation.

Natriello and others (1988) assert that schools should offer a multiple abilities curriculum and move beyond the narrow range of academic tasks which rely on reading skills to allow students to experience success. Wheelage (1988) recommends an "experiential" curriculum including community service, career internship, political/social action, and/or outdoor adventure.

Researchers (1990) of the Office of Research, Evaluation and Assessment, New York City Board of Education, state that poor and minority students are at the greatest risk of failure because of a gap between home and school. This gap is the difference in the expectations parents and teachers have of students, and between the social and language skills required of students at home and at school. When the schools represent an alien culture to students and fail to represent parental interests, students disengage from the school culture and the socioeconomic universe it represents. The following traditional compensatory education approaches are not effective in educating at-risk students: (1) retention; (2) pullout programs; and (3) in-class aides. The following strategies are more promising: (1) reduced class size; (2) early intervention; (3) cohesive social unit; (4) comprehensive services; (5) intensive interventions; (6) bilingual instructional services (7) culturally sensitive programs (8) built-in flexibility; (9) active teaching; (10) engaged learning; (11) cooperative learning; and (12) community involvement.

School Policies

Monitoring/Early Intervention:

The importance of identifying potential dropouts early and then immediately taking action to re-engage them in the school is almost universally agreed upon in the literature on dropout prevention.

Some researchers recommend monitoring and intervention at the earliest points in a student's career. Gruskin and other (1987) recommend good preschool and early childhood programs and Beck and Muia (1980) suggest intervention in nursery school and kindergarten. Those who advocate monitoring and intervention in early elementary school include Walz (1987).

The middle school years are viewed by other researchers as the critical monitoring and intervention stage because this is when students begin to feel disconnected (Sherwood, 1987), (Massachusetts Advocacy Center, 1986), (Wheelock an Dorman, 1988).

Other researchers who advocate monitoring and early intervention include, Natriello and others (1988), Naylor (1987), O'Connor (1985), Sherman (1987), Strother (1986), and Sween and Kyle (1987).

Focus on Absenteeism:

Chronic absenteeism is an obvious early warning sign of potential dropout (Sherman, 1987), (U.S. General Accounting Office, 1987), (Wheelage, 1988). The school's reaction to a student's absenteeism can send a strong message to the student regarding his or her importance to the school. The school's efforts to promote daily school attendance help to reduce dropout rates (Walz, 1987).

Bonikowski (1987), suggests nurturing a cooperative, rather than an adversarial, relationship with parents regarding students' attendance. Wheelock and Dorman's (1988) suggestions include the following:

- Establish an attendance team for monitoring attendance
- Interview students regarding reasons for non-attendance
- Maintain persistent contact with students' homes

Herman (1991) states that educators must take into account the changing social, cultural, and economic trends' contributions to high absenteeism and dropout rates. No curriculum can succeed if the students are not in attendance to learn, develop and advance in society.

Literature on absenteeism written after 1985 demonstrates a shift of focus from the student as truant to the school as part of both the problem and the solution. Four major principles are necessary to any successful intervention--awareness, change in perspectives, early intervention, and cooperation and involvement. Components of an intervention include developing and implementing attendance policies, monitoring, tracking, and recording; getting parents involved; providing counseling and guidance; and providing relevant curriculum or alternative program. Research shows that programs (Harte, 1995) implemented as school wide improvements have consistently been successful in reducing attendance problems. Effective schools are student-centered and operate as: a caring institutional and functional community, a community organization, an experimenter and risk-taker, and a team.

In School Suspension:

Traditional approaches to student discipline include suspending a student for severe infractions. However, a history of suspension is not only predictive of dropout (Wheelock, 1986), but suspension actually encourages students to dropout by sending a clear message that they are not wanted in school (Massachusetts Advocacy Center, 1986).

In-school suspension differs from traditional suspension practices because the student stays on the school premises while serving the term of his/her suspension. Supervised, in-school suspension which includes academic support is recommended as a means to maintain a relationship with students and to make them feel as though they belong in school (Mahood, 1981), (Wheelock and Dorman, 1988).

Roquemore (1991) suggested that intervention in-school suspension programs could counteract students' low self-concepts and negative attitudes toward teachers. Such programs would include: parent training, teacher staff development, school programs that focus on one to one relationships with students, remediation of academic difficulties and administrative monitoring of individual teachers and evaluation of the school involvement.

Non-Retention:

Students who have been retained in a grade are much more likely to dropout than those who have not (Massachusetts Advocacy Center, 1986), (Sherman, 1987), (Wheelock, 1986). Walz (1987) quantifies the relationship between retention and dropout in his literature review:

"The child who has been held back one grade level is 60 times more likely to become a dropout that a student who has not, and the child who has been held back two grade levels is 250 times more likely to become a dropout."

Wheelock and Dorman (1988) argue strongly against retention and suggest giving students specialized instruction with a designated target date at which they will be "caught up" and reintegrated into their appropriate grade level. Some programs they suggest include the following:

- Competency-based curriculum in multi-grade groupings
- Smaller class size
- Summer school with different teaching techniques stressing more active student involvement.

George (1993) suggest that: (a) school districts and schools should disseminate current research on retention to schools staffs (b) school districts with high retention rates should develop a plan to reduce the rate and improve the instructional program for at-risk students (c) school districts should monitor differential effects of retention for different ethnic groups and boys and girls.

Sherwood (1993) states that despite a growing trend toward retention in grade of low-achieving students and apparent public support for the practice, many educators and psychologists disagree with the perception that flunking is an appropriate response to poor academic performance. Research reported in the past two decades indicates that grade-level

retention produces little improvement in student achievement. Some studies presented evidence that students required to repeat a grade actually made less progress than comparable classmates who were promoted. In addition, there are many studies that demonstrate significant psychological damage to children, particularly in terms of lowered self-esteem. Still others associate an increase in the dropout level with retention in grade. In Florida, a number of approaches to improving student achievement without resorting to grade retention have been proposed. Among them are the following:

- tutorial programs, including peer tutoring, cross-age tutoring, and adult volunteer tutoring, coordinated with classroom instruction;
- extended basic skills programs, which eliminate "non-essentials" from the student day, with the additional time being applied to reading, writing, and mathematics;
- cooperative learning programs;
- extended-year programs, achieved in Florida because of funding constraints through summer school; and
- individualized instruction through such technologies as interactive video, word processing, and story starters.

Students At Risk:

Most studies agree that the main factors associated with dropping out include students' socioeconomic status, school behavior, and academic achievement.

"Dropout rates are higher for students coming from low socioeconomic backgrounds, from single-parent families, and from non-English language family backgrounds," stated Frase (1989) in the first annual report by the National Center for Education Statistics. This nationwide study also found higher dropout rates for students living in cities than in suburbs or rural areas, and in the South and West rather than in the Northeast. Students who marry or have children, or who have had problems with the law or school authorities, are also at greater risk.

Academic factors are clearly related to dropping out. Students who received poor grades, who had repeated a grade, who were overage for their class, and who had poor attendance for reasons other than illness were more likely to drop out. "A powerful predictor... was the attendance record during the first four months of tenth grade," Frase reported.

Barber and McLellan (1987) found that dropouts in a Wisconsin community showed clear indications of academic problems by the third grade. Their achievement test scores were significantly lower than those of their classmates and also below their ability as measured by intelligence tests; teacher comments alone identified potential dropouts with 63 percent accuracy. Poor attendance, failing grades, and low overall GPA marked these students' high school careers.

Conley (1992) in his research states that national and state policies are establishing expectations that essentially all students will graduate from high school. As schools begin to adjust their goals accordingly, they found most of their basic organizational practices must change. At-risk students demand personalized education, meaningful material, success-based tasks, continuous contact with trusted adults, and a stable peer group.

Traditional grouping and grading practices do not facilitate success for at-risk students. Teachers have a very difficult time accepting the notion that all students can succeed without standards being lowered. There is an increasing tension between meeting the needs of both "gifted" and "at-risk" students within the traditional organizational paradigm.

Restructuring schools are using cooperative learning strategies, project centered learning, learning teams, schools-within-schools, block scheduling, advisor-advisee programs, enhanced parental involvement, expansion of learning into the community, and an increasing integration of vocational and academic curricula into "applied academics" courses or strategies to meet the needs of diverse group of students.

Parent/Community Involvement

The complex needs of at risk students call for the utilization of a wide range of resources. The school's efforts to coordinate with others who have an interest in the student's life can result in synergistic benefits to the student at risk.

Parents:

Parents may be the most important force keeping children in school. At the high school level there is a tendency for parental involvement to decline. Efforts must be made to re-engage parents in their children's education.

> "Student achievement is strongly influenced by efforts to bridge home and school as a team" (Ochoa, 1987).
>
> "The collaboration with families is an important intervention strategy" (Willis, 1986).

"Encouraging parental involvement in school learning activities helps prevent dropping out" (Walz, 1987).

The above observations illustrate the conventional wisdom regarding the role of parental influence on dropout prevention. It has been found that successful dropout programs have activities to enhance parental support (Naylor, 1987). Programs should develop policies to help increase parents' interest and monitoring of their children's progress (Strother, 1986), (Ekstrom and others, 1986).

Wheelock and Dorman (1988) suggest "blurring the home-school boundary line" by involving parents in adult education classes at the school, offering a GED program for parents, and involving parents in policy making.

Wagonseller (1992) states that despite the difficulties of parenting, few people have actually been trained to be parents or to become involved in their children's education. To address these problems, each community needs to develop a comprehensive parent involvement model.

A community parent involvement model would include the following elements:

- training parent trainers to conduct parenting classes in every school
- change the focus of the Parent Teacher Association (PTA) to parent-teacher administration
- develop in each school a parent education program for expectant parents and parents of very young children
- develop a parent education program for parents of elementary age children
- develop a parent education program for parents of children with special needs (Example: disabilities, gifted, etc.)
- develop monthly parents' workshops on topics of interest to parents
- create a family lifestyle class for high school students

Research has shown that one of the most promising ways to increase students' achievement is to involve their families (Charkin, 1993; Henderson and Berla, 1994). They also found that family participation in education was twice as predictive of academic learning as family socioeconomic status. Establishing partnerships with families has many benefits for schools and families, but Epstein says, "the main reason to create such partnerships is to help all youngsters succeed in school and in later life" (1995, p. 701).

Research on families and student learning has shown that students at all grade levels do better work in school, feel better about themselves as learners, set higher goals, and dream bigger dreams when their parents are knowledgeable, supportive, encouraging and involved with their education. Parent involvement in education can take a variety of forms, including volunteering to help in the school, doing a presentation for a class, helping chaperon field trips, and supplying materials. The most important type of involvement, however, is encouraging, monitoring, and helping your children with their schoolwork. When parents and school work together, children grow in an environment of consistent expectations and shared purpose, where children become better students and parents become better teachers.

APPENDIX B

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